Young Acousticians Network Newsletter #132 April 2024



....

FPA

Newsletter's Summary

Agenda

Get a reminder on upcoming events and deadlines. Feel free to contribute if you become aware of any change!

News

This month we're highlighting International Noise Awareness Day and the panel discussion with four impressive experts from different fields related to noise, which will be moderated by YAN INAD.

Job announcements

Find your dream job in this fresh list of opportunities! If you wish to announce a position, please email the <u>YAN team</u>.

Publications

This month, find a publication by Abdullah Alkan discussing "An Investigation of Sound Sources in Smart Houses for Improved Machineto-Human Communication".

Upcoming Events

April 2024

27th - 29th AES 6th International Conference on Audio for Games Tokyo, Japan

30th - DSC "Immersive Audio & Quality Development in Digital Meetings" Online - Zoom

May 2024

07th - DSC "The Power of the Human Voice" Online - Zoom

15th - 18th SAM 2024 Symposium on Acoustic Metamaterials #4 Hanasaari, Espoo, Finland

22nd - IOA "Artificial Intelligence for Acoustics"

London, UK

29th- 31st AIA 50th National Conference

Taormina, Italy

29th- 31st AES 4th International Conference on Audio and Music Induced Hearing Disorders Copenhagen, Denmark

June 2024

05th - 07th Understanding Acoustics

Enugu, Nigeria

10th - 11th BEBEC 2024 Berlin Beamforming Conference Berlin, Germany

12th - 14th International Conference ACOUSTICS 2024 High Tatras Štrbské Pleso, Vysoké Tatry, Slovakia

15th - 17th AES Europe 2024 International Convention

Madrid, Spain

 17^{th} - 20^{th} ICUA2024 International Conference on Underwater Acoustics $_{\mbox{Bath},\mbox{ UK}}$

25th - 28th JJBA2024 2nd Emerging Bioacousticians Days Moulin-Blanc, Brest, France

 $\rm 26^{th}$ - $\rm 28^{th}~\rm AES~5^{th}$ International Conference on Automotive Audio Gothenburg, Sweden

July 2024

08th - 11th ICSV30 30th International Congress on Sound and Vibration Amsterdam, Netherlands

09th - 11th Workshop Guided Ultrasonic Waves : Emerging Methods (GUWEM)

Überherrn, Germany

12th - 15th TOSS2 ACTOR Timbre and Orchestration Summer School Vancouver, Canada

25th - 27th IBPC2024 9th triennial conference of the International Association of Building Physics Toronto, Canada

coming Deadlines	
April 2024	
29 th - Acoustics 2024 Manchester, UK. Abstract submission	
30 th - ICUA2024 International Conference on Underwater Acoustics	s .Bath, UK. Paper submission
30 th - GUWEM Workshop - Guided Ultrasonic Waves : Emerging M	ethods. Überherrn , Germany. Abstract submissior
30 th - ICSV30 30th International Congress on Sound and Vibratio	n. Amsterdam, Netherlands. Paper submission
May 2024	
12 th - AES Europe 2024 International (Madrid, Spain. Paper submission	Convention
15 th - FIA2024	
13 th Iberoamerican Congress on Acoustics. Santiag	o, Chile. Paper submission
19 th - Quiet Drones 2024 Manchester, UK. Paper submission	
20 th - BEBEC 2024 Berlin Beamforming Conference. Berlin, Germany.	Paper submission
31 st - AES 5 th International Conference Gothenburg, Sweden. Paper submission	e on Automotive Audio
31 st - Acoustics 2024 High Tatras Štrbské Pleso, Vysoké Tatry, Slovakia. Abstract sub	mission
June 2024	
28 th - Acústica 2024 XIII Congresso Ibérico de Acústica. Faro, Portugal.	Paper submission
July 2024	

10th - IEEE IS2 2024

5th IEEE International Symposium on the Internet of Sounds. Erlangen, Germany. Paper submission

News

International Noise Awareness Day -

24th April

The noise awareness day is all about making communities aware of the detrimental effects of noise on our health and wellbeing. Participants organise different activities within their local communities such as workshops or offering information, advocate changes in legislation or experiencing one minute of silence at 2:15 pm.

Thus, we invite you to bring awareness to your own community, for example, by sharing some trivial information with the people around you or explaining the importance of protecting our hearing in loud environments. Find what matters to you and share it with others!

On this day, YAN is offering several talks you can join online via MS Teams. Check out our social media for the latest updates on the planned talks!

SOUNDSCAPES Summer School (30 June - 5 July 2024)

The Soundscapes summer school in Athens is bringing together student and educators to learn more about data sonification. The school promises to introduce innovative practices for teaching in the classroom and promote inclusivity by exploring the hearing sense and integrating it to help learning.

For students interested, the school is offering an introduction to data sonification through both theoretical and practical courses. Moreover, the school is promoting STEAM education, bringing the Art in the STEM framework. Thus, the school is also creating an environment for starting interdisciplinary research. In the end, music is a universal language.

DAGA 2024

The 50th Annual Conference on Acoustics - DAGA 2024 - took place this year from March 18th to 21st in Hannover. The YAN collaborated together with jungeDEGA to organize an icebreaker event and a pub night for young acousticians to meet and socialize. The DAGA Best Poster Awards were granted to Erik Fleischhauer ("On the Use of Dereverberation Algorithms in Binaural Cue Adaptation") and Stürenburg Lara ("Herausforderungen bei Messungen von Lüftungsgeräuschen in einem reflexionsfreien").

The DEGA Student Award went to Jeremy Lawrence for his master's thesis titled "Sound Source Localisation with the Rotating Equatorial Microphone (REM)". You can read Jeremy's jornal paper on the subject here:

Direction of arrival estimation using the rotating equatorial microphone

ASSA 2024

The Autumn School Series in Acoustics is opening registration this month! The two topics for this year are computational acoustics, and building and room acoustics. If you are interested, you can check out a more detailed program on the school's website. You can always reach out to the community on discord to find out about previous editions from participants.

Noise Matters: Unraveling the Effects and Solutions of Environmental Noise What:

A 1h lunch-panel talk on the topic of 'noise': four experts from different fields related to noise engage in an interesting conversation. The talk will be moderated/guided by the YAN, with room for input from the audience. The panel talk will be held online. **Practicalities:**

- Online event (MS Teams), link will be shared to those who registered in the google form.
- Date: INAD Wednesday/April 24th, lunchtime (12:00-13:00 BST/13:00-14:00 CET)
- Duration: 1 hour
- Google forms link to register & purpose questions: <u>https://tinyurl.com/YANINAD2024</u>
- Comments on social media post & Google forms to collect questions beforehand.

Confirmed panel members:

Prof. Jian Kang



Prof. Stephen Stansfeld

Professor Stephen Stansfeld is Emeritus Professor of Psychiatry at Queen Mary University of London. He qualified in medicine from St Bartholomew's Hospital Medical College and did further training in Psychiatry and Epidemiology. His research on noise has involved studies of noise sensitivity, noise and mental health and noise and children's learning. He directed the European 5th Framework funded RANCH Study on the effects of aircraft and road traffic noise on children's cognition and health and the European Network on Noise and Health (ENNAH). He chaired the WHO Guidelines Development Group on the WHO guidelines for environmental noise. He has 300+ publications.

Field of Expertise: Environmental noise and mental health, noise sensitivity and environmental noise and children's learning and health, psychiatry and epidemiology.

Prof. Gaetano Licitra



Professor Gaetano Licitra, BSc and MSc in Physics, Spec. Diploma in Health Physics, is currently Director of the Pisa Department for the Environmental Agency of Tuscany Region. Habilitated as Associate Professor and Full Professor in Applied Physics, he has been teaching at the University of Pisa since 1997. Listed among the 2% top scientists by Elsevier for Acoustics, he has played a major role in the development of guidelines, including the WHO Night Noise Guidelines, the EEA Quiet Zone Guidelines, and IEC and ISO standards. These achievements are the result of extensive international collaboration in EU projects such as the V, VI and VII Framework

Programmes, Life and Life Plus, Interreg, as well as active participation in working groups and concerted actions. *Field of Expertise:* Environmental noise modelling and measurements techniques to assess noise

and measurements techniques to assess noise pollution as well as innovative noise exposure mitigation solutions.

Prof. Christ Glorieux

Professor Christ Glorieux studied physics at KU Leuven, Belgium, graduated in 1987 and obtained his Ph.D. degree in 1994. Now he is professor at the Laboratory of Soft Matter and Biophysics, teaching physics and sounds and waves, general physics, and experimental physics to undergraduate and graduate students. He is doing research in the field of photothermal and photoacoustic applications for the study of thermophysical properties of soft and biological matter, the development of measurement techniques for characterization of mm-mm layered structures, and non-destructive evaluation. He is also guiding PhD research in physical acoustics, room acoustics, building acoustics and environmental acoustics. Field of Expertise: Physics modelling of acoustic wave propagation, building and room acoustic measurements, psychoacoustics and environmental noise monitoring, in particular around airports.



Professor Jian Kang, FREng, MAE, IMCAE, FIOA, FASA, DFIIAV, CEng, is Professor of Acoustics and Soundscape at IEDE, The Bartlett, UCL. He has been a full professor since 2003, and worked in the field of architectural and environmental acoustics for 40 years, with 80+ research projects, 800+ publications, and 90+ engineering/consultancy projects. He is recipient of the Advanced ERC Grant Award, currently working internationally on developing Soundscape Indices (SSID). He is President of the IIAV, chair of the EAA's Technical Committee for Noise, and the EU COST Action on Soundscape of European Cities and Landscapes. He was awarded the UK IOA Rayleigh Medal in 2022. Field of Expertise: Environmental noise and soundscapes



Job Announcements

Technicien Acoustique & Vibrations Sixense Engineering/VINCI Construction. Nanterre, France.

Consultant in Acoustics, Noise & Vibration

Sandy Brown. Edinburgh/London, UK.

CIFRE PhD: acoustic imaging for the prediction of radiated noise from submerged complex structures Naval Group. Marseille, France.

PhD in Acoustics Physikalisch-Technische Bundesanstalt. Braunschweig, Germany.

PhD in classroom acoustics and soundscape University of Ferrara. Ferrara, Italy.

Scientist/PhD candidate Physikalisch-Technische Bundesanstalt. Braunschweig, Germany. Ð

Audio Signal Processing Engineer Luxoft. Remote/Poland.

Research Studentship/PhD: effects of sound-induced vibration on canvas paintings Oxford University. Oxford, UK.

Post-Doc in Acoustics LMSSC, Cnam Paris. Paris, France.

Acoustic Engineer HEAD Acoustics. Herzogenrath, Germany.

Research Fellow on Generative AI for audio University of Surrey. Surrey, UK.

MSCA PhD Position in SEASOUNDS DN CNRS. Marseille, France.

Publications

An Investigation of Sound Sources in Smart Houses for Improved Machine-to-Human Communication

This study aims to investigate the ever-evolving indoor soundscapes of smart houses by classification of the sounds emitted from smart devices. Nowadays, communication is no longer limited to person-to-person. Smart devices frequently communicate with users by verbal or tonal notifications. Therefore, acoustic characteristics of smart houses, especially reverberation time and background noise levels, have increased importance in achieving improved and lossless signal transfer and speech intelligibility. It is hypothesized that most houses are unsuitable for effective tonal and verbal communication with smart devices regarding acoustical conditions. Within the scope of the study, the devices found in the smart technology market were investigated. The sounds emitted from the identified devices were then classified according to their communicative nature (verbal/tonal), designability, customizability, and cause (i.e., intentional or consequential). The acoustic requirements for effective communication with the individual smart devices were analyzed in addition to the resulting holistic indoor soundscape of the smart houses The results of the study will help architects, interior architects, and other environmental designers to improve the quality of communication while guiding future research to understand indoor soundscapes of smart houses.

About the Author



Abdullah Alkan is a master's degree student at Çankaya University, Türkiye, in the field of acoustics and indoor soundscape. His research focuses on indoor soundscape of smart houses and how smart technology aids user pleasantness and enhances the machine-to-human communication in smart homes. Abdullah is working as a teaching assistant at Çankaya University alongside doing research.



Contact us: <u>eaa.yan@euroacoustics.org</u>